Claims

We claim:

1. In a time division multiple access system, a method comprising the steps of:

receiving a first requested call type;

setting a first slotting structure as an existing slotting structure for the inbound and outbound channels based on the first requested call type.

2. The method of claim 1 wherein the first slotting structure is a preferred slotting structure for the first requested call type.

3. The method of claim 1 further comprising the steps of:

receiving a second requested call type for a second call; and

denying the second call if there are not enough available channels in the system to support the second requested call type.

4. The method of claim 1 further comprising the steps of:

receiving a second requested call type; and

determining whether the second requested call type can be supported by the existing slotting structure.

5. The method of claim 4 further comprising the step of, if the second requested call type can be supported by the existing slotting structure, granting the second requested call type if there are enough available channels in the system to support the second requested call type; otherwise denying the second requested all type.

6. The method of claim 4 further comprising the steps of, if the second requested call type cannot be supported by the existing slotting structure:

determining whether the first requested call type can be supported by a second slotting structure required to support the second requested call type; and

if the first requested call type can be supported by the second slotting structure, changing the existing slotting structure to the second slotting structure, and granting the second requested call type.

7. The method of claim 6 further comprising the step of signaling the first subscriber of the second slotting structure if the first requested call type can be supported by the second slotting structure.

8. The method of claim 4 wherein the second requested call type is selected from a group comprising: a subscriber unit telephone interconnect time division duplex call, a subscriber unit-to-wireline console time division duplex call, a subscriber unit-to-subscriber unit half duplex call with reverse channel signaling, a subscriber unit-to-talkgroup half duplex call on one channel, and a subscriber unit-to-subscriber unit half duplex call without reverse channel signaling.

9. The method of claim 1 further comprising the steps of:

receiving a second requested call type for a second call;

determining that the second requested call type is assigned a higher priority than the first requested call type; and

if the second requested call type cannot be supported by the existing slotting structure, dynamically changing the existing slotting structure to a second slotting structure that supports the second requested call type, and granting the second requested call type.

10. The method of claim 9 further comprising the step of terminating the first requested call type if the first requested call type cannot be supported by the second slotting structure.

11. The method of claim 9 further comprising the steps of:

determining a number of available channels in the system; and

if there are not enough available channels in the system to support the second requested call type, terminating the first requested call type.

12. The method of claim 1 wherein the first requested call type is selected from a group comprising: a subscriber unit telephone interconnect TDD call, a subscriber unit-to-wireline console TDD call, a subscriber unit-to-subscriber unit half duplex call with reverse channel signaling, a subscriber unit-to-talkgroup half duplex call, and a subscriber unit-to-subscriber unit half duplex call without reverse channel signaling.

13. The method of claim 1 wherein the first slotting structure is one of an aligned slotting structure or an offset slotting structure.